Meningitis

Community-Acquired:

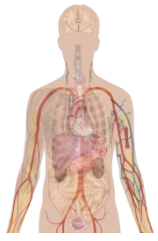
No recent neurosurgery or invasive neurological procedure (e.g. intrathecal pump insertion). Absence of encephalitis.

Post-Neurosurgical:

Recent neurosurgery or invasive neurological procedure - infection attributable to device implantation in neural tissue (e.g. spine stimulator). Absence of encephalitis.

Encephalitis:

Patient has symptoms of seizures, altered mental status, and focal neurologic signs.
Absence of neck stiffness or jolt accentuation.



Community-Acquired Meningitis

Treatment duration is based on causative organism (see below). Aseptic meningitis is often caused by viruses. For other organisms, please contact Infectious Diseases or Medical Microbiology. Tailor treatment once cultures are available, if culture is negative by day 3, consider discontinuing antibiotics.

Empiric therapy

Drug	Dose	Route	Duration
Ceftriaxone	2 g q12h	IV	2-3 days then reassess
If ceftriaxone allergy: Meropenem 2 g IV q8h x 2-3 days then reassess			

→If elderly/immune-suppressed **ADD** to ceftriaxone **ONE** of:

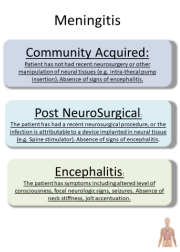
Ampicillin	2 g q4h	IV	2-3 days then reassess
TMP-SMX	5 mg/kg q6h	IV	2-3 days then reassess

→If suspected *S. pneumoniae* resistance, **ADD** to ceftriaxone:

Vancomycin	Load 30 mg/kg, then 20 mg/kg q8-12h	IV	2-3 days then reassess

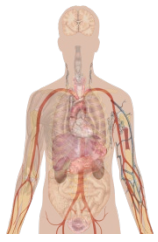
Directed therapy (if susceptible)

S. pneumoniae	Penicillin	4 MU q4h	IV	10-14 days
H. influenzae	Ampicillin	2 g q4h	IV	10 days
N. meningitidis	Penicillin	4 MU q4h	IV	5 days
L. monocytogenes	Ampicillin	2 g q4h	IV	21 days



TMP-SMX = trimethoprim-sulfamethoxazole (cotrimoxazole)

Remember to check cultures, revise your diagnosis and consider oral Rx by day 3

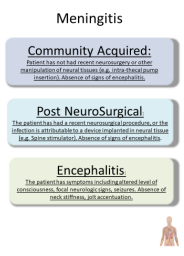


Post-Neurosurgical Meningitis

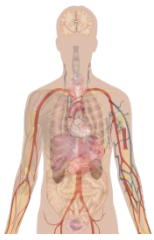
Meningitis developing after neurosurgery or CNS manipulation is commonly caused by organisms introduced at the time of surgery, which may include coagulase-negative staphylococci and non-fermenting gram negative rods such as *P. aeruginosa*. Empiric therapy should cover broadly, but be narrowed as soon as the causative pathogen is identified.

Treatment duration for proven post-surgical meningitis is dependent on the pathogen, presence of prosthetic hardware, and other factors. Please contact Infectious Diseases to assist in determining the duration of therapy.

Drug	Dose	Route	Duration
Meropenem	2 g q8h	IV	10 days then reassess
OR			
Ceftazidime	2 g q8h	IV	10 days then reassess
AND			
Vancomycin	Load 30 mg/kg, then 20 mg/kg q8-12h	IV	10 days then reassess



Remember to check cultures, revise your diagnosis and consider oral Rx by day 3



Encephalitis

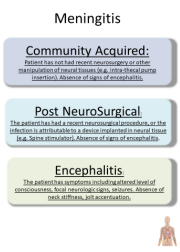
Encephalitis is distinguished from meningitis by seizures, changes in behaviour, confusion and disorientation, without prominent meningitic signs. It is most commonly caused by viruses (e.g. herpes simplex virus, arthropod-borne [West Nile virus]), although most causes are never identified.

Drug	Dose	Route	Duration
Acyclovir	10 mg/kg q8h	IV	14 days then reassess

Step-down option

Antiviral therapy should be stopped if herpes virus is determined to not be responsible for infection. Other viral infections require supportive care alone, since anti-virals have not been shown to be beneficial. If a specific virus is identified, contact Infectious Diseases for further guidance. Once patient is clinically improving and able to take or absorb oral medications, consider step-down:

Drug	Dose	Route	Duration
Valacyclovir	1000 mg TID	PO	Up to 14-21 days of total therapy



Remember to check cultures, revise your diagnosis and consider oral Rx by day 3